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Amendment to the Claims:

1. (Currently Amended) A magnetic resonance imaging system for acquiring a high resolution image of a region of interest of a body, the MRI system comprising:

[[-]]   ~~means for acquiring~~ a scanning unit which is controllable by a control unit to acquire at least a low resolution whole-body plan scan image of the body[[,]] and high resolution images of selectable regions of the body;

[[-]]   ~~means for identifying~~ a body identification module which autonomously identifies and locates the region of interest of the body in the whole-body plan scan image[[,]];

[[-]]   ~~means for determining~~ an acquisition parameter module which determines acquisition parameters for [[the]] a high resolution image on the basis of the ~~whole-body plan scan image~~ identified and located region of interest[[,]]; and

[[-]]   ~~means for acquisition of~~ the control unit controlling the scanning unit to acquire the high resolution image of the identified region of interest ~~by making use of~~ using the determined acquisition parameters.

2. (Currently Amended) The system according to claim 1, further ~~comprising~~ including:
a graphical user interface for an operator's selection of the region of interest in the whole-body plan scan image.

3. (Currently Amended) The system according to claim 1, wherein:
~~means for acquisition of~~ the scanning unit which acquires the high resolution image [[are]] ~~further adapted to~~ moves the location of the region of interest of the body to a region of optimum performance of an examination space of the magnetic resonance imaging system to acquire the high resolution image of the region of interest.

4. (Currently Amended) The system according to claim 1, [[wherein]] further including:

~~the means for identifying the region of interest of the body are further adapted to~~ a body positioning parameter module which extracts body positioning parameters from the whole-body plan scan image, the body positioning parameters being indicative of [[the]] an anatomy, [[the]] a geometry, [[the]] an orientation, and [[the]] a mass of the body.

5. (Currently Amended) The system according to claim 1, wherein the ~~means for identifying the region of interest of the body are further adapted to~~ body identification unit performs an assignment between the region of interest and a part of the body.

6. (Currently Amended) The system according to claim [[4]] 5, wherein the ~~means for determining the acquisition parameters are further adapted to~~ acquisition parameter module determines the acquisition parameters with respect to the body positioning parameters and the assignment between the region of interest and a part of the body.

7. (Currently Amended) The system according to claim 4, wherein the ~~acquisition means are adapted to~~ acquisition parameter module dynamically determines the acquisition parameters with respect to the body positioning parameters and with respect to the ~~body part~~ region of interest being in the region of optimum performance of the examination space of the magnetic resonance imaging system.

8. (Currently Amended) The system according to claim 1[[4]], wherein the determined acquisition parameters are subject to optimization with respect to a specific absorption rate model and/or peripheral nerve stimulation model.

9. (Currently Amended) The system according to claim 4, further ~~comprising~~ including:
pattern recognition ~~means for~~ module which autonomously ~~identifying~~ identifies parts of the body on the basis of the whole-body plan scan image.

10. (Currently Amended) A computer readable medium which stores a program [[product]] for controlling a magnetic resonance imaging system for acquiring to acquire a high resolution image of a region of interest of a body, the computer program product comprising program means for by performing the steps of:

[[-]]   acquiring a low resolution whole-body plan scan image of the body[[,]];

[[-]]   autonomously identifying and locating [[the]] one or more regions of interest of the body in the whole-body plan scan image [[,]];

[[-]]   determining acquisition parameters for the high resolution image on the basis of each the whole-body plan scan image identified and located region of interest[[,]]; and

[[-]]   acquiring the high resolution image of each identified [[the]] region of interest by making use of using the determined acquisition parameters.

11. (Original) The computer program product readable medium according to claim 10, wherein the steps further comprising include:

identifying a region of the whole body plan scan corresponding to a region of interest designated on a graphical user interface.

computer program means being adapted to identify a region of interest in the whole-body plan scan image by processing an operator's selection being made by means of a graphical user interface.

12. (Currently Amended) The computer program product readable medium according to claim 10, wherein the step of acquiring the high resolution image further includes:

the computer program means for acquisition of the high resolution image are further adapted to control the positioning of moving the region of interest of the body relative into a region of optimum performance of the examination space of the magnetic resonance imaging system.

13. (Currently Amended) A method for acquiring a high resolution image of a region of interest of a body by making use of with a magnetic resonance imaging system, the method comprising the steps of:

[[-]]   acquiring a low resolution whole-body plan scan image of the body[[,]];

[[-]]   with a processor, autonomously identifying and locating the region of interest of the body[[,]] in the low resolution whole-body plan scan image;

[[-]]   with a processor, determining acquisition parameters for the high resolution image on the basis of the whole-body plan scan image identified and located region of interest[[,]]; and

[[-]]   acquiring the high resolution image of the region of interest by making use of with the determined acquisition parameters.

14. (Currently Amended) The method according to claim 13, wherein further including:

        extracting body positioning parameters are extracted from the whole-body plan scan image; and

        in order to optimize optimizing acquisition parameters for the high resolution image with respect to a specific absorption rate model and/or peripheral nerve stimulation model.

15. (New) The system according to claim 1, wherein the acquisition parameter module calibrates the magnetic resonance system on the basis of the whole body plan scan image.

16. (New) The method according to claim 13, further including calibrating the magnetic resonance system on the basis of the whole body plan scan image.

17. (New) A diagnostic imaging system, comprising:

        a magnetic resonance (MR) scanner which uses selectable acquisition parameters to generate images with any of a plurality of properties;

a graphical user interface by which an operator selects one or more regions of interest of a body;

a control unit including a process programmed to:

control the MR scanner to acquire a low resolution whole-body plan scan image of the body;

receive the selected a region of interest from the graphical user interface;

autonomously identify the selected region of interest in the whole body plan scan image;

position the selected region o f interest in an imaging region of the MR scanner;

determine a relationship of the selected regions of interest relative to at least one part of the body;

extract body positioning parameters from the whole-body plan scan image, the body positioning parameters being indicative of an anatomy, a geometry, an orientation, and a mass of the body;

determine position dependent acquisition parameters for a high resolution image on the basis of the extracted body positioning parameters and the relationship of the regions of interest relative to an identified body part;

optimize the determined acquisition parameters with respect to a specific absorption rate model and/or peripheral nerve stimulation model; and

control the MR scanner to acquire the high resolution image of the region of interest using the optimized acquisition parameters.